

Application No. 09/213,858. It is respectfully requested that this rejection be held in abeyance until claims are allowed at which time, Applicants are prepared to provide appropriate terminal disclaimers.

The rejection of claims 1-15 as unpatentable under 35 U.S.C. 102(b) as anticipated by Goldhor et al. (US No. 5,231,670) is respectfully traversed. Goldhor et al. may be directed to similar subject matter as the present invention. However, they are not directed to the same problems as the present invention, and do not disclose any solution which anticipates the present invention.

It should be noted that the present invention is not primarily concerned with speech dictation or "speech to text" recognition systems wherein the spoken terms are recognized for word processing purposes. Rather, the present invention is directed to speech or voice recognition of spoken commands used to control systems for a wide variety of purposes including control commands which could be used for the control of speech recognition word processing systems. Applicants make this distinction because the Goldhor system deals with both command recognition and spoken text recognition. However, Goldhor et al. deal with command recognition and processing in a manner quite different from Applicants' processing of commands. As will be hereinafter shown, the Examiner in applying Goldhor's disclosure does not distinguish Goldhor's processing of commands from Goldhor's processing of spoken text and seems to be indiscriminately combining elements from Goldhor's command processing with Goldhor's spoken text processing in the attempt to anticipate Applicants' inventions.

The present invention is directed to command control technology, wherein, for example, a user may navigate

through a computer system's graphical user interface (GUI) by the user speaking the commands which are customarily found in the systems' menu text, icons, labels, buttons, etc.. Many deficiencies in speech recognition both in word processing and in command technologies are due to inherent voice recognition errors due in part to the status of the technology and in part to the variability of user speech patterns and the user's ability to remember the specific commands necessary to initiate actions. In word processing, visual feedback which confirms input is inherent, since the purpose of the process is to translate from the spoken to the visual. However, in speech recognition driven command and control systems, the user must often refer to command help menus to find appropriate commands for his purposes. Thus, there is a constant need for switching back and forth from a natural speech input mode of operation to command help menus.

The present invention provides command control systems which are heuristic both on the part of the computer in that it learns and narrows from the natural speech to command user feedback cycles and on the part of the user, in that he tends to learn and narrow down to the computer system specific commands as a result of command display feedback cycles. The present invention is directed to an interactive computer controlled display system with speech command input recognition which includes means for predetermining a plurality of speech commands for respectively initiating each of a corresponding plurality of system actions in combination with means for providing for each of said plurality of commands, an associated set of speech terms, each term having relevance to its associated command. Also included are means for detecting speech command and speech terms. Responsive to such detecting means, the system

provides means responsive to a detected speech command for displaying said command, and means responsive to a detected speech term having relevance to one of said commands for displaying the relevant command.

Goldhor et al. is directed among other things to sorting spoken text to be processed from interspersed spoken control commands but it does not disclose displaying the recognized commands or any spoken terms relevant to such commands for any purpose.

The functioning of the Goldhor system is summarized in its Abstract:

".....enable the system and method to process both simple spoken words as well as commands and to provide the necessary text generation in response to the spoken words or execute an appropriate function in response to a command."

Please note that text is generated, i.e. displayed in response to spoken words but functions are executed in response to commands without any mention of any command display. This is the tenor of the entire Goldhor disclosure. Recognized text is displayed but recognized commands are only carried out but not displayed.

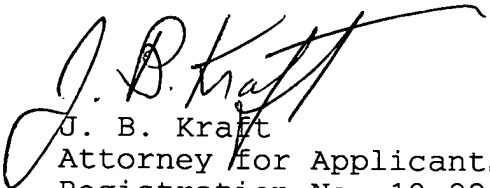
Furthermore, Goldhor et al. do not disclose displaying commands when certain provided speech terms having relevance to such commands are input. In this connection, the Examiner has pointed to col. 5, lines 40-55 for this disclosure. When this section discusses displaying sets of candidates and best match candidates, it is discussing only candidates for detected vocabulary words. Nowhere is there any discussion of displaying commands or proposed commands.

With respect to the cited col 3, lines 63-68 and col 4, lines 1-5, and col 5, lines 29-39, commands which will be used to control text terms are described as stored associated with the text terms. However, there is no

teaching whatsoever in Goldhor that upon the detection of the associated speech term, the command will be displayed. Commands are not displayed in Goldhor for any purpose.

In view of the foregoing, claims 1-15, all of the claims in the present patent application are submitted to be in condition for allowance, such allowance is respectfully requested.

Respectfully submitted,

  
J. B. Kraft  
Attorney for Applicants  
Registration No. 19,226  
(512) 473-2303

PLEASE MAIL ALL CORRESPONDENCE TO:

Leslie Van Leeuwen  
IPLaw Dept. - IMAD 4054  
IBM Corporation  
11400 Burnet Road  
Austin, Texas 787582